

## CLAIMS

1. A connection method intended for a high-frequency connection of a semi-rigid coaxial cable provided with a single-core inner conductor, the method including:

using an adapter fastener, which is intended for both an adapter connection and a circuit board connection, the adapter fastener being electrically conductive;

wherein the adapter fastener comprises a hole which extends through the adapter fastener and to which the coaxial cable is fixed;

wherein the sheath of the coaxial cable is electrically connected to the adapter fastener and a male connection is formed at the adapter fastener by means of the inner conductor of the coaxial cable;

wherein in the adapter connection, the male connection is connected to a female connection of a standardized adapter by connecting the inner conductor of the coaxial cable electrically to a female contact of the standardized adapter and by connecting the adapter fastener electrically by means of adapter protrusions to the frame of the standardized adapter;

wherein in the circuit board connection, the adapter fastener is fastened by means of circuit board protrusions to a circuit board and the adapter fastener is connected electrically by means of the circuit board protrusions to the earth of the circuit board; and

wherein the inner conductor of the coaxial cable, used in the male connection, is connected electrically to a desired electrical conductor of the circuit board.

2. A method as claimed in claim 1, wherein the standardized adapter is an SMA adapter.

3. A method as claimed in claim 1, wherein the standardized adapter is fastened with screws to holes of the adapter protrusions, provided with threads.

4. A method as claimed in claim 3, wherein the adapter protrusions are made narrower in the area between a hole intended for the coaxial cable and the hole provided with threads.

5. A method as claimed in claim 3, wherein the adapter protrusions are made narrower in the area between the hole intended for the coaxial cable and the hole provided with threads.

6. A method as claimed in claim 1, wherein the adapter fastener is fastened with screws through holes in the circuit board protrusions to the circuit board.

7. A method as claimed in claim 1, wherein the adapter fastener is intended to be repeatedly connected and disconnected to and from both the adapter and the circuit board.

8. A method as claimed in claim 1, wherein the adapter fastener comprises two adapter protrusions and two circuit board protrusions; and  
the adapter protrusions are on the opposite sides of the hole of the coaxial cable and the circuit board protrusions are at a right angle to the adapter protrusions.

9. A connection arrangement arranged to be used for a high-frequency connection in a coaxial cable comprising a single-core inner conductor, the arrangement further comprising:

an adapter fastener intended for both an adapter connection and a circuit board connection;

wherein the adapter fastener comprises a hole which extends through the adapter fastener and to which the coaxial cable is fixed;

wherein the sheath of the coaxial cable is electrically connected to the adapter fastener and a male connection is formed at the adapter fastener by means of the inner conductor of the coaxial cable;

wherein for the adapter connection, the male connection is formed at a female connection of a standardized adapter and the inner conductor of the coaxial cable is arranged to be connected to a female contact of the standardized adapter;

wherein the adapter fastener comprises adapter protrusions for fastening the adapter fastener to the standardized adapter and connecting the adapter fastener electrically to the frame of the standardized adapter;

wherein for the circuit board connection, the adapter fastener comprises circuit board protrusions for fastening the adapter fastener to a circuit board and connecting the adapter fastener electrically to the circuit board; and

wherein the inner conductor of the coaxial cable, used in the male connection, is arranged to be connected electrically to the circuit board.

10. A connection arrangement as claimed in claim 9, wherein the standardized adapter is an SMA adapter.

11. A connection arrangement as claimed in claim 9, wherein the adapter protrusions comprise a hole which is provided with threads and to which the standardized adapter is arranged to be fastened with screws.

12. A connection arrangement as claimed in claim 11, wherein the adapter protrusions are made narrower in the area between the hole intended for the coaxial cable and the hole provided with threads.

13. A connection arrangement as claimed in claim 11, wherein the adapter protrusions are made narrower in the area between the hole intended for the coaxial cable and the hole provided with threads.

14. A connection arrangement as claimed in claim 9, wherein the circuit board protrusions comprise holes, by which the adapter fastener is arranged to be fastened with screws to the circuit board.

15. A connection arrangement as claimed in claim 9, wherein the adapter fastener is arranged to be repeatedly connected and disconnected to and from both the adapter and the circuit board.

16. A connection arrangement as claimed in claim 9, wherein the adapter fastener comprises two adapter protrusions and two circuit board protrusions; and

wherein the adapter protrusions are on the opposite sides of the hole of the coaxial cable and the circuit board protrusions are at a right angle to the adapter protrusions.